2012

INFO 450-01 Systems Analysis and Design

Jay Palmisano
Xavier University

Info 450 – 01 Systems Analysis and Design

Fall, 2012

COURSE SYLLABUS

INSTRUCTOR:

Name	Jay Palmisano
Email:	palmisanoj@xavier.edu
Office Location:	G08 Smith Hall
Office Hours:	T: 1:00 – 6:00 W: 3:00 – 4:00 Or by appointment
Telephone:	513 745 2967

PRE-REQUISITES

This is a senior level course that is required for Information Systems majors, and is a direct prerequisite to the IS capstone course, System Development Project (INFO-495). Assuming that prerequisite requirements are met, this class could also benefit anyone who will interact with computer professionals. It is assumed that students have all prerequisites from the IS program, as well as from other business programs including, Management, Accounting, and Finance. Specific courses listed as prerequisites are FINC-300, MGMT-300, and MKTG-300, with INFO-358 as a prerequisite or co-requisite. Questions concerning prerequisites should be discussed with the professor at the beginning of the class.

COURSE DESCRIPTION AND OBJECTIVES

This course focuses on structured tools and techniques for the development of computerized information systems with emphasis on the process involved in the analysis and design of the development process. Special emphasis will be placed on team development, on project management, and on quality control for the development of effective and efficient information systems.

The primary objective of this course, combined with the System Development Project (INFO-495) course, is to assist students in learning Systems Analysis and Design concepts, techniques, and processes. We are concerned mainly with both the technical and management issues concerning the analysis, design and integration of information systems into an organization. It examines issues such as how we decide what new information systems an organization needs, how we approach the development and management of the systems, and how we manage the information system project.

The objectives of the course are to enable students understand:

- the organizational and technical process of information systems development from conception to use
- the management of information systems within the organizations
- the process of developing a small-scale information system

This is accomplished through the use of the book, case problems, group interaction, and experiences of the instructor. A structured life cycle approach and associated techniques will be emphasized. The approach begins with problem identification and ends with the design, implementation, and support of an information system that will include both technology and business processes. Students successfully completing this class should have a good understanding of how to utilize technology to solve business problems. Appropriate oral and written communication skills are important. Students will be responsible for activities such as data modeling, project management, cost/benefit analysis, application generation, and report writing; as these skills will be required to complete the assignments. These topics will be discussed at an overview level, but detailed instruction will not be provided. Students are expected to pursue outside resources (Writing Center, textbooks, library, Web sites, consultation with the instructor, etc.) to review those areas in which they may be deficient.

TEXTBOOK

Required Text: *Introduction to Systems Analysis & Design*,
Whitten & Bentley, McGraw-Hill, 2008

COURSE POLICIES AND REQUIREMENTS

Attendance and participation: You are expected to attend each class meeting. Each **unexcused** absence will be recorded as a zero score for that day in the Attendance/Participation area. Class participation is critical for a successful course as reflected in the Attendance/Participation portion of the grade distribution. Class participation will involve required reading assignments and group projects. For any group activity, you must be present to receive the group grade. If you are absent you will receive a zero for that group activity.

Assignments and Exams: All assignments are due at the beginning of class on the due days (given in the course schedule). Unapproved late submission of assignments **will be not accepted**. Failure to turn in an assignment results in zero.

Academic Dishonesty: Unless otherwise specified (e.g., group projects or presentations), all assignments should be done individually. If you are caught using other student's work at any point in the exercises or any part of the course, it will result in an F for the course and additional discipline according to the policy of Xavier University.

The following are expected of a student in this class:

1. This course requires that the student study, ahead of time, the material allocated for that class period. This means you must read the assigned work prior to the lecture. Each class period will consist of lectures, group work and either class tests, presentations by students or quizzes based on the previous class lecture.
2. Homework will be assigned to reinforce the concepts presented in class. Homework will have assigned due dates; work must be turned in by the start of class on the day it is due. Late assignments must be turned in before the start of the class following the original due date.
3. All tests must be taken at the appropriate time. If a student has to miss a test, the student must discuss the absence with me **BEFORE** the test date. Remember that any student missing an exam without prior permission will be given a zero as a grade on the missed test.

TESTING AND ASSIGNMENTS

There will be two exams during the semester. Test materials will come from the text and from class lectures. Questions could include true/false, multiple choice, matching, short answers, and other forms that could be used to determine the student's understanding of the topic or process. Work on the Case Project will help students learn the skills necessary to manage the processes involved with a Systems Development Life Cycle. The exams will be given near the mid-semester and end of the semester.

CASE PROJECT

The Case Project will be assigned early in the semester. Project work will be scheduled throughout the semester, which will require students to manage time allocated to project and non-project assignments. The overall goal is to begin working on the Case Project as the course material is discussed in lectures and team meetings. Students will perform the analysis required to understand the business problem and develop a written and oral proposal that could provide a desirable solution. Team meetings with the instructor will be used to provide feedback during this process. Skills learned throughout the semester, as well as those developed in prerequisite classes, will be required to complete the project. The remaining phases of the project, including design and implementation, will be completed in the System Development Project course (INFO-495). General project requirements and guidelines are available in the Assignment section of Blackboard. Specific project deliverables could vary based upon the nature of the project, and will be discussed in more detail when the projects are assigned.

Project assignments will be Service Learning Projects, which are designed to help non-profit organizations, while teaching students to define, design, and implement Information Systems projects using a System Development Life Cycle approach. To complete the Service Learning projects, students must understand the work of the various non-profit organizations, and the impact that they have on the community. This is very much in line with the WCB Mission, which states: “We educate students of business, enabling them to improve organizations and society, consistent with the Jesuit tradition”. The projects will generally be developed using Microsoft Access with some Visual Basic subroutines. Although these skills should have been developed in the prerequisite classes, students will be required to obtain reference material necessary to expand knowledge of the required development technologies.

Specific Service Learning projects could involve new development and/or enhancements to existing systems. Students will be required to learn the details of existing systems to clearly understand what needs to be done to enhance the system or complete a new development project. Careful attention to detail in the testing and implementation process will be required to ensure that a quality product is delivered. Students must effectively communicate with assigned clients to clearly understand the requirements, and develop a solid testing and implementation plan.

GRADING

The student's final grade will be determined by the two exams, work completed on the case project, project participation, and class participation. Peer evaluations, instructor observations, and client input will be used to determine an individual's project participation. It is important that all members of the group fully participate in the project. Each project will be assigned a grade based upon the work completed by the project team. If a student does not fully participate in the project, that student's grade will be lowered accordingly. Students are also expected to read the chapters, attend class regularly, participate in class discussions, and complete other assignments as requested. Final grades will be calculated as follows:

GRADING DISTRIBUTION

	Grade %	A	95-100	C+	77-79
Exam I	25%	A-	90-94	C	73-76
Exam II(Final)	25%	B+	87-89	C-	70-72
Case Project (with peer review)	30%	B	83-86	D	60-69
Participation, Homework, In-class exercises	20%	B-	80-82	F	Below 60

NOTE

We live in dynamic times. Your exposure to information technology in this course should strongly support this fact. Events may dictate that changes be made to what appears above and/or to the course schedule and assignments. Every attempt will be made to minimize any change, but I reserve the right to make changes if necessary. Advance notice will, of course, be given to the students. And, the current versions of the course Blackboard pages are to be taken as official. It is the student's responsibility to work with the current versions of these pages. It is the instructor’s responsibility to keep the versions current.